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Patent Claims

1. A method for motion estimation in a digitized image having pixels,
   - in which the pixels are grouped in picture blocks,
   - in which the pixels are grouped to form at least one first picture area and one second picture area,
   - in which first motion estimation is carried out in a first search area for at least one first picture block in the first picture area in order to determine a first motion vector by means of which a movement of the first picture block is described in comparison to the first picture block in a preceding predecessor picture and/or in comparison to the first picture block in a subsequent successor picture,
   - in which second motion estimation is carried out in a second search area for at least one second picture block in the second search area in order to determine a second motion vector by means of which a movement of the second picture block is described in comparison to the second picture block in a preceding predecessor picture and/or in comparison to the second picture block in a subsequent successor picture,
   - in which the first search area and the second search area are of different sizes, and
   - in which the size of the first search area and/or of the second search area is varied as a function of a predetermined picture quality, by means of which the first picture block and/or the second picture block are/is coded.

2. The method as claimed in claim 1,

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characterized in that the size of the first search area and/or of the second search area are/is varied as a function of a quantization parameter by means of which the first picture block and/or the second picture block are/is quantized.

3. The method as claimed in one of claims 1 to 2, used for coding the digitized picture.

4. The method as claimed in claim 3,
- in which variable length coding of the motion vectors is carried out,
- in which a number of stored, different tables, in which codes for variable length coding are stored, are used for variable length coding.

5. The method as claimed in claim 4, characterized in that the tables are matched to the maximum length of the motion vectors.

6. An arrangement for motion estimation in a digitized picture having pixels,
having a processor which is set up such that the following steps can be carried out:
- the pixels are grouped into picture blocks,
- the pixels are grouped to form at least one first picture area and one second picture area,
- first motion estimation is carried out in a first search area for at least one first picture block in the first picture area in order to determine a first motion vector by means of which a movement of the first picture block is described in comparison to the first picture block in a preceding predecessor picture and/or in comparison to the first picture block in a subsequent successor picture,

- second motion estimation is carried out in a second search area for at least one second picture block in the second picture area in order to determine a second motion vector by means of which a movement of the second picture block is described in comparison to the second picture block in a preceding predecessor picture and/or in comparison to the second picture block in a subsequent successor picture,
- the first search area and the second search area are of different sizes, and
- wherein the processor is set up such that the size of the first search area and/or of the second search area are/is varied as a function of a predetermined picture quality by means of which the first picture block and/or the second picture block are/is coded.

7. The arrangement as claimed in claim 6, wherein the processor is set up such that the size of the first search area and/or of the second search area are/is varied as a function of a quantization parameter by means of which the first picture block and/or the second picture block are/is quantized.

8. The arrangement as claimed in one of claims 6 or 7, used in a picture coding device.

9. The arrangement as claimed in one of claims 6 or 7, used in a picture coding device,
wherein the processor is set up such that
- variable length coding of the motion vectors is carried out,

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- a number of stored, different tables, in which codes for variable length coding are stored, are used for variable length coding.

10. The arrangement as claimed in claim 9, characterized in that the processor is set up such that the tables are matched to the maximum length of the motion vectors.

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